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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/586,162	10/30/2006	Satoshi Suzuki	7390/88234	5634

42798 7590 06/23/2010

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EXAMINER	
BUSHEY, CHARLES S	

ART UNIT	PAPER NUMBER
1797	

MAIL DATE	DELIVERY MODE
06/23/2010	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/586,162	SUZUKI ET AL.	
	Examiner	Art Unit	
	Scott Bushey	1797	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *09 April 2010*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-21* is/are pending in the application.

4a) Of the above claim(s) *9,11-16,20 and 21* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-8,10 and 17-19* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *7-14-06; 12-9-09*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application.
6) ☐ Other: _____.

DETAILED ACTION

Election/Restrictions

1. Applicant's election with traverse of Species B, as depicted by Fig. 2 of the application, in the reply filed on April 9, 2010 is acknowledged. The traversal is on the grounds that there is no undue burden upon the Office to examine all of the species at the same time. This is not found persuasive. Applicant cites MPEP 803 and quotes therefrom, "If the search and examination of an entire application can be made without serious burden, the examiner must examine it on the merits, even though it includes claims to independent or distinct inventions." The passage as quoted by applicant and reproduced above simply does not apply to the situation of the instant application. There are no independent or distinct inventions claimed in the application. The election requirement pertains to an election of patentably distinct "species of the invention". Applicant further argues that the International Search Authority prepared an ISR and an IPER without requiring an election be made. This too is not persuasive, since the claims presented herein and to the ISA are not identical, nor is there any way to determine if the ISA performed an adequate search without first performing a complete search and then comparing the results.

The requirement is still deemed proper and is therefore made FINAL.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

4. Claims 1, 2, 8, and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP 2001-170659 taken together with WO 03/020405.

JP 2001-170659 (English Abstract; Figs. 1-3) substantially disclose applicant's invention as recited by instant claims 1, 2, 8, and 10, except for the bubble detection means for detecting the amount of bubbles within the product carbonate spring stream. Applicant should note that the valve located downstream from the gas-liquid separator serves as a throttle means to control the pressure of the water in the gas-liquid separator.

WO 03/020405 (Abstract; Fig. 6) disclose an apparatus similar to JP 2001-170659 for producing carbonate spring, including bubble detection means (13), which in conjunction with the signal supplied to the controller (16) of the apparatus, controls the amount of carbon dioxide gas supplied to the mixing means and the amount of the carbon dioxide gas that is ultimately mixed into the water of the carbonate spring. It

would have been obvious for an artisan at the time of the invention, to provide a bubble detection means within the line leading from the gas-liquid separator of the device as taught by JP 2001-170659, in view of the teaching by WO 03/020405, since such would provide a better controlled carbonate spring product.

5. Claims 3-5, 7, 17, and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over the reference combination as applied to claims 1, 2, 8, and 10 above, and further in view of JP 7-322392.

The reference combination as applied to claims 1, 2, 8, and 10 above, substantially discloses applicant's invention as recited by instant claims 3-5, 7, 17, and 18, except for the bubble detection means being in the specific form of ultrasonic transmitter and receiver elements arranged horizontally along the lead out line to constantly monitor the amount of gas bubbles entrained within the carbonate spring stream.

JP 7-322392 (Abstract; Figs. 4, 5, 11, 14, and 15) disclose well known ultrasonic transmitter and receiver means for constantly monitoring the amount of bubbles within a liquid flow stream within a conduit. It would have been obvious for an artisan at the time of the invention, to provide the bubble detection means as suggested by the primary reference combination, in the form of an ultrasonic transmitter and receiver means for constantly monitoring the amount of bubbles within the carbonate spring stream, in view of JP 7-322392, since such would provide for accurate detection of the bubble amount and convenient control of the transfer of the liquid stream to the tub.

6. Claims 6 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over the reference combination as applied to claims 1, 2, 8, and 10 above, and further in view of JP 5-84272.

The reference combination as applied to claims 1, 2, 8, and 10 above, substantially discloses applicant's invention as recited by instant claims 6 and 19, except for the liquid level detection means arranged within the gas-liquid separator.

JP 5-84272 (Abstract; Fig. 1) disclose a carbonate spring producing apparatus similar to that of the primary reference combination, wherein liquid level detection means within a gas-liquid separator is used to control the flow of gas and liquid flow from the separator back to the mixer and to the end use tub, respectively. Wherein one having ordinary skill in the art readily realizes that the liquid level within the gas-liquid separator is a convenient indicator of the amount of gas that is not in solution within the liquid within the separator, it would have been obvious for an artisan at the time of the invention, to provide the apparatus as suggested by the primary reference combination, to include a liquid level detection means within the gas-liquid separator of the apparatus as suggested by the primary reference combination, in view of JP 5-84272, since such would provide a convenient back-up detection means of the undissolved gas within the system in the event of failure of the primary bubble detection means.

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Scott Bushey whose telephone number is 571 272-1153. The examiner can normally be reached on M-Th 6:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Duane Smith can be reached on 571 272-1166. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Scott Bushey
Primary Examiner
Art Unit 1797

/S. B./
6-20-10

/Scott Bushey/
Primary Examiner, Art Unit 1797